T-529 P.005/009 F-233

Application No. 10/538,383; Group Art Unit 1621 Response dated April 10, 2007 Response to Office Action dated January 11, 2007

### **REMARKS**

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#### Claim status

Claims 4-10 are pending and rejected over the prior art. Claims 11-14 have been added. Basis in the specification for Claims 11-14 can be found at page 4, lines 5-6; page 4, line 14; page 4, lines 14-16; and page 4, lines 19-21, respectively.

# Claim Rejection under 35 U.S.C. Section 112, first paragraph

Claims 9 and 10 have been rejected for failing to comply with the written description requirement.

Basis for Formula 1 for the linoleic acid lower alkyl ester starting materials recited in Claim 9 can be found at the Heading <u>"Linoleic acid lower alkyl esters"</u>at page 3, lines 29-30 and bridging page 4, lines 1-7.

The Formula (I) of R<sup>1</sup>CO-R<sup>2</sup> in which R<sup>1</sup>CO is the acyl residue of linoleic acid and R<sup>2</sup> is a linear or branched C<sub>1.5</sub> alkyl group is described in the Specification therein.

The Examiner is kindly requested to reconsider and withdraw the rejection.

### Claim Rejection under 35 U.S.C. Section 102(e)

Claims 4, 8-10 have been rejected over US 6,897,327 ("Rongione"). The rejection is respectfully traversed.

The 102(e) prior art date of Rongione is its US filing date of May 8, 2003.

The present application claims priority of DE Application No.10259157.1 filed December 18, 2002 under 35 U.S.C. Section 119, The Office Action Summary Sheet at Box 12 acknowledges that all copies of the certified copies of the priority documents for this application have been received by the Office. Applicants have thus perfected their priority claims.

Rongione is thus not prior art to the present application in view of its later 102(e) prior art date.

The Examiner is kindly requested to withdraw the rejection.

## Claim Rejection under 35 U.S.C. Section 103(a)

Claims 4-10 have been rejected under 103(a) as being unpatentable over U.S. Pat. No. 6,743,931 ("Saebo") in view of U.S. Pat. No. 6,420,577 ("Reaney").

According to the Examiner, the claims differ from the primary reference, Saebo, by "including a crystallization step after saponification." The Examiner further states that "it would have been obvious to one of ordinary skill in the art at the time the invention was made to added [sic] crystallization as a purification step after saponification." Thus, the Examiner cites the teachings of Reaney for the addition of crystallization after saponification as a "conventionally known" modification.

The rejection is respectfully traversed. For the following reasons, it is submitted that the combination of the teachings of Saebo and Reaney is improper under the law.

Saebo, the primary reference of the rejection, discredits the teachings of Reaney, the secondary reference, to the extent that there would be no motivation to the person having ordinary skill in the art ("PHOSITA") to combine the references in the manner suggested by the Examiner.

According to the M.P.E.P. at 2143.01 II:

"The test for obviousness is what the combined teachings of the references would have suggested to one of ordinary skill in the art, and all teachings in the prior art must be considered to the extent that they are analogous arts. Where the teachings of the two or more prior art references conflict, the examiner must weigh the power of each reference to suggest solutions to one of ordinary skill in the art, considering the degree to which one reference might accurately discredit another. In re Young, 927 F.2d 588, 18 USPQ2d 1089 (Fed. Cir. 1991) (emphasis added),"

Saebo, at Column 8, lines 6-30 describes:

"In older isomerization processes, some of which are still in use in more modern format, production of the conjugated fatty acids was carried out in aqueous alkali (generally NaOH) at high temperatures in excess of 200°C....At these temperatures, the time of reaction should be greatly foreshortened, but there is relatively little control over the isomerization. At the higher end of the temperature range, one skilled in the art would predict almost complete conversion to [the undesirable] double trans species (emphasis added)."

Reaney is one of the "older isomerization processes" that utilize high temperatures in the production of conjugated linoleic acids, which "older process" is discredited by Saebo, as discussed above.

As described in Reaney at Column 4, lines 1-25, isomerization of linoleic acid is carried out:

"at temperatures above 170°C and the reaction accelerates with increases in temperature. Preferred embodiments involve performing the reaction above 180°C.... The reaction proceeds very rapidly at temperatures above 200°C... (emphasis added)."

Thus, according to the teachings of Saebo, "one skilled in the art would predict almost complete conversion [of linoleic acid] to [the highly undesirable] double trans species" isomers of conjugated linoleic acid by following the teachings of Reaney.

The extent of the discredit in the art to the teachings of Reaney is further evidenced and clearly demonstrated by the disclosure of Rongione, the reference in another rejection in the present application.

At Column 2, lines 20-27 of Rongione, Reaney is explicitly discussed as follows: "U.S. Pat. No. 6,420,577 (Reaney, et al.) describe a process for making CLAs by reacting a linoleic acid-rich oil with a base, in the presence of a catalytic amount of such a base, in an aqueous medium via simultaneous saponification and quantitative isomerization. However, this process utilizes a heightened temperature (>170.degree. C.). Higher temperatures lead to the formation of undesirable CLA isomers, including the trans, trans-CLA isomers (emphasis added)."

Rongione also thus recognized and discredited the teachings of Reaney, as did Saebo discussed above, as leading the PHOSITA to obtain highly undesirable trans, trans-CLA isomers by carrying out isomerization at the temperatures taught in Reaney.

Pursuant then to M.P.E.P. 2143.01 II cited above, the Examiner must weigh the power of each reference (Saebo and Reaney) to suggest solutions to one of ordinary skill in the art, taking into consideration the degree to which Saebo clearly discredits the teachings of Reaney.

In the present instance, Saebo (as well as other analogous art such as Rongione) clearly, unambiguously, and demonstrably discredit the teachings of Reaney.

The PHOSITA would thus, based on the discredit of Reaney by Saebo, have no motivation whatsoever to combine the teachings of Saebo and Reaney, to modify the teachings of Saebo by including the crystallization step of Reaney after the saponification step of Saebo, as has been suggested by the Examiner as the basis for the present rejection.

When the Examiner revisits the present rejection, based on the requirements of analysis of the prior art under Section 2143.01 II of the M.P.E.P., in view of the disclosures of the prior art as discussed above with respect to the teachings as a whole of Reaney, it is respectfully submitted that the Examiner will clearly recognize that there is no basis in the law to maintain the rejection of the claims over the combination of Saebo and Reaney.

Applicants therefore respectfully request the Examiner to kindly reconsider and withdraw the rejection of Claims 4-10 as obvious over the combination of Saebo and Reaney.

The Examiner is kindly requested to reconsider and withdraw all rejections against the claims of the present application.

It is respectfully submitted that Claims 4-14 are patentable over the prior art and are in condition for allowance.

### Fees Due

No additional fees are believed due, but the Commissioner is authorized to charge (or credit any balance) any fees deemed due (or owing) to Deposit Account No. 50-1177.

Favorable reconsideration and a Notice of Allowance are respectfully solicited. If there are any remaining issues, the Examiner is kindly invited to contact the undersigned.

Respectfully submitted,

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